





Stopping the Spread of Water Chestnut in the Connecticut River watershed

Since water chestnut (*Trapa natans*) was discovered in the Connecticut River watershed in 1998, the Silvio O. Conte National Fish and Wildlife Refuge has led an effort to stop this invasive aquatic plant from spreading. Along with protecting the ecosystem of each impacted water body, a priority goal is to prevent the plant from spreading, especially to the globally significant wetlands at the mouth of the river.

Water chestnut is a rooted aquatic plant that grows in still or slow-moving water up to sixteen feet deep. It's floating "rosettes" can completely cover the surface of shallow water bodies, displacing native plants and making it impossible to swim, boat, or fish. Since it is an annual, it can be controlled by preventing the plant from setting seeds - which must be done faithfully every year until any existing seed bed is exhausted. This can take a long time because seeds can remain dormant for up to 12 years before germinating. Efforts to bring this species in check in the watershed include:

- machine harvesting and the use of herbicide at large or exceptionally dense sites, the largest and most persistent being Log Pond Cove (20 acres) in Holyoke, Massachusetts,
- engaging volunteers and resource managers to search lakes and ponds for its presence and report their findings, and
- handpulling smaller infestations that are discovered.

Through this effort, dozens of water chestnut sites have been discovered in varying stages of establishment. Most of the known populations in the Connecticut River watershed are in Massachusetts and Connecticut, but it is beginning to be found to be found in Vermont and New Hampshire as well. Volunteers are helping to hand-pull the plant at these sites and through the years hundreds of people have been involved. Impressive strides have been made at greatly diminishing infestations and slowing the plant's spread.

Partnerships have been critical to the effort, with numerous organizations, agencies and individuals pitching in to provide the use of canoes and boats, publicity, and "people-power" and at times providing needed funding. Funding for a sustained effort is a continuing challenge and will determine the long-term success for this "early detection and rapid response" initiative.

Learn more by contacting the Silvio O. Conte National Fish and Wildlife Refuge at 413-548-8002 x8115.